

7 Work Order ID 121958

121958

Page 1

Monday, July 07, 2014 9:50:38 AM

Item ID:	D3619-1	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:				Stop		*NS2*	
Item Name:	Grommet						
Start Date:	7/07/14	Start Qty: 4.00	*4*	Cust Item ID:			
Required Date:	7/07/14	Req'd Qty: 4.00	*4*	Customer:			
Reference:							
Approvals:	Process Plan: MJS	Date: 14-07-07	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr	
D3619	Rev A	

100 0.00

100 PURCHASING

Purchasing Memo 0.00
Purchasing Issue P/O 24913 Purchase Part Number: 9610K17 Supplier: MC
MASTER CARR Certificate of conformity is required

CD 14/07/08 4

110 0.00

110 Packaging Memo 0.00
Packaging Ensure material certification is attached

BR 14/07/10 (G)

120 0.00

120 QC Memo 0.00
Quality Control QC6- Inspect dimensions to drawing

DAS
27
9-89
MHD

4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework	Scrap	Use-as-is	Skid-tube	Crosstube	Water Jet	Engineering		
NCR No. _____	Suspected Unapproved			Machining	Small Fab	Prod. Eng. Coor.	Quality		
				Thermoforming	Finishing	Rec/Store/Packaging	Other		
				Large Fab	Composite	Supplier			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear		General							
		Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced			
Centre Not Concentric		BOM/Route	Grain	Over/Under tolerance	Set-up				
Cracks		Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure				
Crimp/Kink/Ripple/Wave		Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld				
Cuffs		Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled				
Crushing		Countersink	Misaligned/off center	Positioned Wrong					
Heat Treat		Cut Too Short	Mislabeled	Power Loss/Surge					
Inspection Strip in Tube		Drawing	Misread						
Marks/Chatter		Drill Holes	Off-set						
Turning Sequence		Finish	Out of Calibration						
Wave/Twist in Tube		Fit/Function	Out of Sequence						

Work Order ID 121958

Monday, July 07, 2014 9:50:38 AM

121958

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Item ID: D3619-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Grommet

Stop

NS2

Start Date: 7/07/14 Start Qty: 4.00

4

Cust Item ID:

Required Date: 7/07/14 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

130

Packaging

0.00

24

14-7-11

Packaging

Memo

0.00

****Remove supplier paperwork from box.***** Identify and
StockLocation: ST052

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Quality Control

Memo

0.00

MJ 14-07-11

14-7-11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS						
	Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering	<input type="checkbox"/>
	Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coor.	<input type="checkbox"/>	Quality	<input type="checkbox"/>
	Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other	<input type="checkbox"/>
Suspected Unapproved			Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear	General								
	Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Folio/Program	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>	Pressure/Forced
	Centre Not Concentric	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Set-up
	Cracks	<input type="checkbox"/>	Broken/Damage/Defect	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Temperature/Cure
	Crimp/Kink/Ripple/Wave	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Inspection Incomplete/Unqualified	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Weld
	Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>	Wrong Stock Pulled
	Crushing	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Misaligned/off center	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>	
	Heat Treat	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>	Other
	Inspection Strip in Tube	<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Misread	<input type="checkbox"/>		<input type="checkbox"/>	
	Marks/Chatter	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Off-set	<input type="checkbox"/>		<input type="checkbox"/>	
	Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>	
	Wave/Twist in Tube	<input type="checkbox"/>	Fit/Function	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>	

Picklist Print

Page 1

Monday, July 07, 2014 9:50:38 AM

Work Order ID: 121958

121958

Parent Item: D3619-1

D3619-1

Parent Item Name: Grommet

Start Date: 7/07/14

Required Date: 7/07/14

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 07-04-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
9610K17		Purchased		No		110	Each	0.0000	1	4	**	7/07/14	E

9610K17

GROMMET

DQA: _____ Date: _____

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Date:

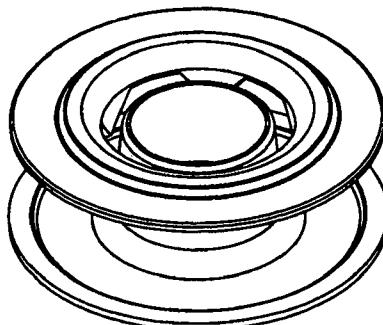
Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									
FAULT CATEGORY									
Landing Gear			General						
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>					
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>					
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>					
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>					
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>					
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>						
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>					
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>							
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>							
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>							
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>							

DART

DESIGN <i>LE</i>	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>PH</i>	APPROVED <i>PH</i>	DRAWING NO. D3619	REV. A	SHEET 1 OF 1
DATE 07.03.26		TITLE GROMMET	SCALE NTS	
REV A	DATE 07.03.26	DESCRIPTION NEW ISSUE		

SPECIFICATION CONTROL DRAWING



RELEASED
07 04 02

D3619-X GROMMET
WHERE X REPRESENTS THE GROMMET TRADE SIZE

DART P/N	TRADE SIZE	DESCRIPTION	HOLE SIZE	MAX. MTL THICKNESS	MCMASTER CARR P/N
D3619-0	0	BRASS GROMMET W/ TEETH	1/4	0.110	9610K16
D3619-1	1	BRASS GROMMET W/ TEETH	9/32	0.120	9610K17
D3619-2	2	BRASS GROMMET W/ TEETH	3/8	0.150	9610K18
D3619-3	3	BRASS GROMMET W/ TEETH	7/16	0.230	9610K19
D3619-4	4	BRASS GROMMET W/ TEETH	1/2	0.300	9610K21

NOTES:

- 1) PURCHASE INFO: MCMASTER-CARR P/N'S INCLUDE THE FOLLOWING:
48 GROMMETS FOR SIZE 0 & 1,
24 GROMMETS FOR SIZE 2, 3 & 4,
D3619-XT1 HOLE PUNCH,
D3619-XT2 STRIKER BLOCK,
D3619-XT3 PUNCH AND
D3619-XT4 DIE
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

1407-07
NO. 121958.MJ
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
ENGINEERING
RETURN TO
SHOP COPY

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION				AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework	Skid-tube	Crosstube	Water Jet	Engineering					
NCR No. _____	Scrap	Machining	Small Fab	Prod. Eng. Coor.	Quality					
	Use-as-is	Thermoforming	Finishing	Rec/Store/Packaging	Other					
	Suspected Unapproved	Large Fab	Composite	Supplier						

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear		General							
Bending	Bend	Folio/Program				Outside Dimensions	Pressure/Forced		
Centre Not Concentric	BOM/Route	Grain				Over/Under tolerance	Set-up		
Cracks	Broken/Damage/Defect	Hardware				Part Incorrect	Temperature/Cure		
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified				Part Lost/Missing	Weld		
Cuffs	Contamination	Instructions Incomplete/Unclear				Part Moved	Wrong Stock Pulled		
Crushing	Countersink	Misaligned/off center				Positioned Wrong			
Heat Treat	Cut Too Short	Mislabeled				Power Loss/Surge	Other		
Inspection Strip in Tube	Drawing	Misread							
Marks/Chatter	Drill Holes	Off-set							
Turning Sequence	Finish	Out of Calibration							
Wave/Twist in Tube	Fit/Function	Out of Sequence							



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO24913

Purchase Order Date 7/8/2014

PO Print Date 7/8/2014

Page Number 1 of 6

Order From :

MCMASTER-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 330 995 5500

Ship To Contact
Ship To Phone
Ship Via: Purolator ground ppd
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 10
Currency USD
FOB FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ CD Taxable	Promise Date	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	9610K17	GROMMET	7/11/2014 Yes	7/11/2014	4.00 Each	\$12.90	\$51.60
2	9610K18	GROMMET	7/11/2014 Yes	7/11/2014	4.00 Each	\$13.31	\$53.24

AS PER DWG D3619 REV. A
B121958

AS PER DWG D3619 REV. A
B121971

Line Total: \$53.24

Note:

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO24913

Page 1 of 2

Order Placed By
Chantal Lavoie

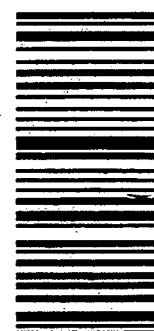
07/08/2014

McMaster-Carr Number
6052189-02

Line	Description	Ordered	Shipped		LNS	A82
2	9610K18 Military Specification Grommet Kit, with Teeth Washer, Trade Size 2, 3/8" ID, 24 Grommets Your Part Number: B121971	4 Each	4		1 - 315 - 09	43 - 34 K18 4EA 2
1	9610K17 Military Specification Grommet Kit, with Teeth Washer, Trade Size 1, 5/16" ID, 48 Grommets Your Part Number: B121958	4 Each	4	DAS 27 9-89	1 - 313 - 03	01 - 02 K17 4EA 1
3	1770A525 Cam Lock with Polished Nickel Finish, Keyed to C420A, 3/4" Diameter Hole, 7/64" Material Thickness Your Part Number: D3373-1P	20 Each	20	14/770	1 - 698	3
4	9464K12 Viton(R) Fluoroelastomer O-Ring, AS568A Dash Number 007, Packs of 100 Your Part Number: 71500-30	1 Pack	1		3 - 708	4
5	9464K351 Viton(R) Fluoroelastomer O-Ring, AS568A Dash Number 035, Packs of 10 Your Part Number: 71500-30	1 Pack	1		3 - 707	5
8	2573A677 Hex Die for Thread Repair, 18 X 1.5 mm Thread Size Your Part Number: 71500-30	1 Each	1		2 - 510	8

Dart Aerospace Ltd

EXP
HZ-D



27 lbs
12 lines

Me

17x17x8

FW1BSP21
07/08/2014
14:02:14:32
413
Cycle 51

